Chapter 12 - ALRE Maintenance Support

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Chapter 12

ALRE MAINTENANCE SUPPORT

12.1 Mission.

The Maintenance Support (MS) work center of V-2 division is a key element in the day-to-day successful operation of Aircraft Launch and Recovery Equipment (ALRE). MS is fundamental to the ALRE maintenance organization in that it establishes a single point of maintenance expertise tempered with flexibility and capability. The heart of the MS work center is a group of experienced personnel who possess the requisite NEC necessary to be a maintenance technician. Together with catapult Electrician's Mates and tool control personnel, they make up the MS work center. Their extensive training and background provide the required skills and knowledge to maintain ALRE equipment in a fully operational and safe status.

12.2 Organization.

Figure 12-1 reflects the MS work center organization in V-2 division. The MS Chief/Senior Chief Petty Officer (CPO/SCPO), (MS00), is responsible directly to the ALRE maintenance officer, through the ALRE maintenance CPO, for all functions associated with assigned maintenance responsibilities. The MS CPO/SCPO shall possess the requisite NEC of a maintenance technician and be designated in writing by the air officer. Two team leaders support the MS CPO/SCPO.

- 12.2.1 The maintenance support team leader functions as the VB22 work center supervisor. When tasked, he/she may perform various maintenance actions independent from the primary work center supervisor or work to assist the primary work center. He/she is further tasked with the supervision of tool control center. His/her designation is MS01 and he/she shall possess the requisite NEC of a maintenance technician and be designated in writing by the air officer.
- 12.2.2 The catapult electrician team leader supervises the Electrician's Mates assigned to the MS work center and shall possess the requisite NEC and be designated in writing by the air officer.
- 12.2.3 As illustrated in Figure 12-1, maintenance support technicians, with the requisite NEC 7006, shall fill all MS00 through MS07 billets.
- 12.2.4 The V-2 division tool control center will be manned to a level as directed by the ALRE Maintenance Officer. They will work

directly for the MS Support Team Leader and may be utilized as assistants to the designated maintenance technicians.

12.3 Responsibilities.

Maintenance Support will primarily function during non-operational hours. They may augment primary work center personnel or in many instances serve as the full maintenance crew in order to allow for sufficient crew rest of primary work center personnel. At the ALRE Maintenance Officer's discretion, MS may perform maintenance in the absence of the primary work center supervisor. Under no circumstances will MS be allowed to function any equipment whether related to pre-operational inspections or not without the express permission and under the direct supervision of the primary work center supervisor. Specific examples include but are not limited to:

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---Arresting gear engine function
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- ---Sheave Damper function
- ---Barricade stanchion function
- ---Power pack relief valve function
- ---pole checks
- ---cycle launch valves
- ---function grab (with RRE)
- ---JBD function
- ---NGL function
- ---deck tensioner function
- ---steam smothering test
- ---run water brakes
- ---operate any remote panels
- ---conduct no-loads

Because MS is primarily a maintenance work center, great care must be taken to ensure that all operational/functional requirements are carried out by qualified personnel under the direct supervision of the primary work center supervisor.

12.3.1 The ALRE Maintenance Officer retains the responsibility to determine job assignment. This decision is normally made through maintenance control with work center supervisor inputs. On those tasks where MS will augment the primary work center, the MS team leader shall report to the primary work center supervisor and assist in coordinating all aspects of the job including coordinating QA and material requirements, MAF completion and keeping all parties appraised of work progress. On those tasks where the MS supervisor will act independently from the work center supervisor, the MS supervisor shall coordinate all requirements and be responsible for providing job progress information.

NOTE

In those instances where MS will act independently from the primary work center supervisor, an understanding of complete and thorough communication will be fostered by both supervisors. Communication between each during the planning stage of maintenance actions and thorough debriefs following the conclusion of maintenance actions is mandatory. Face to face turnovers will be the norm. The most minute and unique details of maintenance actions will be brought to the attention of the primary work center supervisor. No detail, regardless of how minor, will be excluded from this debrief.

- 12.3.2 The MS W/C CPO, under direction of the ALRE maintenance officer and/or maintenance control supervisor, is responsible for normal work center administration functions and assignment of MS personnel to specific maintenance tasks. When MS is acting independently from the primary work center supervisor, the MS CPO will assume those duties normally performed by the primary work center CPO. As with the MS team leader and primary work center supervisor, the MS CPO and primary work center CPO, will have a face to face turnover discussing all details of the work performed by MS.
- 12.3.3 MS efforts are primarily to provide support to operating work centers. Documentation of both the primary work center and MS's man hours shall be documented on a MAF. In those instances where MS is conducting maintenance independent from the primary work center, the Maintenance Support Team Leader (MS01) shall provide sufficient documentation to the primary work center supervisor to enable him to complete MAFs. Additionally, MS will track its own man-hours independently.

12.4 Maintenance Procedures

12.4.1 Failure to follow correct maintenance procedures used in the assembly or disassembly of components or subassemblies inevitably results in further problems. Failure to use the proper technical manual, TD, or aperture card; use of the wrong tools and/or improper procedures frequently creates additional problems. The urgency and criticality of the job often leads to hurried, quick-reaction repairs without adequate review of the situation. Standard procedures will include the proper use of technical manuals, TDs, aperture cards, and other technical data to ensure that adequate and complete maintenance is performed. MS is the established base of professional expertise which ensures that proper and complete maintenance evolutions become standard operating procedures, backed by quality assurance inspections.

12.5 ALRE Tool Control Program (TCP)

- 12.5.1 The TCP provides a means to rapidly account for all tools after completing a maintenance task, thus reducing the potential for Foreign Object Damage (FOD) mishaps. The TCP is based on accuracy of inventory. The most significant benefit of the TCP is the saving of lives and equipment damage by eliminating toolinduced FOD incidents caused by lost tools. Additional benefits are:
 - a. Reduced initial outfitting and tool replacement costs.
 - b. Reduced tool pilferage.
- c. Reduced man-hours required to complete each maintenance task.
- d. Assurance that proper tools are available for specific maintenance tasks.
- 12.5.2 NAVAIRWARCENACDIV Lakehurst is assigned responsibility for the ALRE TCP and will maintain a standard Tool Control Plan (TCPL) for all type catapults, arresting gear and visual landing aids. NAVAIRWARCENACDIV Lakehurst Miscellaneous Report 51-OR732 (ALRE Tool Control Manual) (NOTAL), contains amplifying information on this subject including the following:
 - a. An allowance list for tool containers.
- b. A standard tool list and layout diagram for each container.
- c. Procurement information for tool containers and other associated hardware.
- 12.5.2.1 COMNAVAIRLANT and COMNAVAIRPAC will implement the TCPL aboard their respective ships.
- 12.5.2.2 The ALRE maintenance officer shall establish a V-2 division tool control center which will be a responsibility of the MS Team Leader. The tool control center functions are as follows:
- a. Use standardized tool lists to build and maintain V-2 tool containers as specified in the TCPL. Such tool lists shall be utilized in the conduct of an initial wall-to-wall inventory upon implementation of the TCP, and during TYCOM ALRE Maintenance Management Team audits.

NOTE

ALRE special tools are also subject to examination during the TYCOM Maintenance Management Team audits.

- b. Whenever possible, use approved allowance lists as the reference manual for tool requisitions. Report errors in approved allowance lists, to NAVAIRWARCENACDIV Lakehurst.
- c. Initiate all requisitions for initial issue/replacement tools.
- d. Ensure all tool requests are itemized, and all requisitions are itemized. Blank check DD 1348 requisitions are not authorized.
 - e. Ensure that all tool expenditures are recorded.
- f. Maintain custody of all tool containers not signed out on sub-custody.
 - g. Require a signature to issue tool containers.
 - h. Require a signature to issue individual tools.
- i. Issue initial issue and replacement tools; require turnin of broken tools for all replacements.
- j. Ensure all tools and containers are properly marked/etched and appropriate inventory procedures maintained.
- k. Bring noted deficiencies and desired changes to the attention of the MS CPO.

12.5.3 Tool Control Containers

- 12.5.3.1 The silhouette method in conjunction with the inventory list method will be utilized for tool cabinets. The inventory list method is required for portable toolboxes and tool pouches for accountability of all tools.
- 12.5.3.2 A standardized tool list is specified in the TCPL for each type and model ALRE and includes a sufficient quantity of the necessary tools to perform the assigned maintenance tasks. The tool list will show the specific tool inventory required for each container.
- 12.5.3.3 A unique family of tool containers is designated for tool control. Tools listed in the TCPL shall be displayed in accordance with drawings therein. The container exterior will clearly identify the work center/work package and organization. The tools

within the containers shall be identified to comply with the TCPL and have the organization etched on the tool.

NOTE

ALRE maintenance officers may tailor the contents of individual tool boxes to conform to their ship's equipment maintenance requirements. All other requirements of the Tool Control Manual remain in effect.

12.5.3.4 Silhouetting has proved ineffective in identifying missing tools from portable tool boxes, particularly at night. Therefore, an inventory list shall be provided in each portable toolbox.

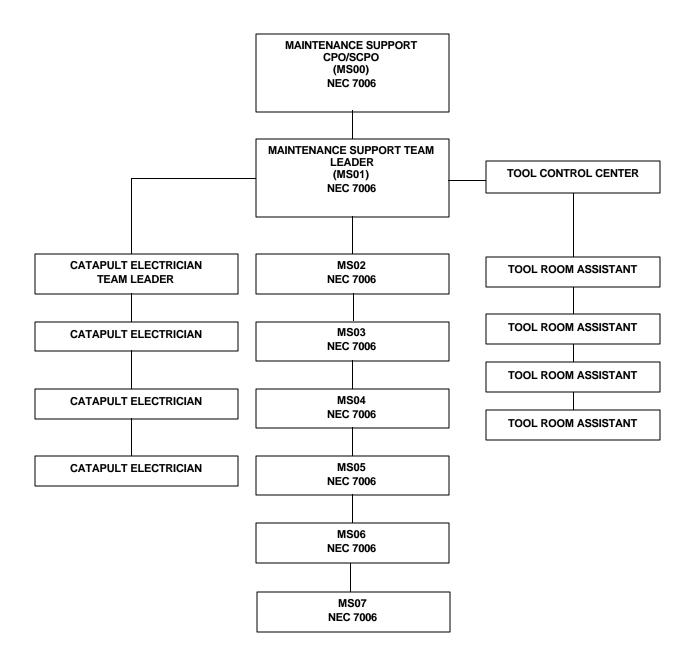


Figure 12-1. Maintenance Support Organization